

Open PhD position in the area of multiscale material modelling

TU Wien is Austria's largest institution of research and higher education in the fields of technology and natural sciences. With over 26,000 students and more than 4,000 scientists, research, teaching and learning dedicated to the advancement of science and technology have been conducted here for more than 200 years. Guided by the motto "Technology for People", TU Wien fosters close collaboration with business and industry and contributes to the prosperity of society.

In the framework of the recently extended **Special Research Area (SFB) "Advanced Computational Design"** (<https://acd.tuwien.ac.at/>), the Research Unit of Structural Simulation and Timber Engineering of the Institute of Mechanics of Materials and Structures invites applications for open PhD positions to be filled in the **second quarter of 2024** in the following area:

Development of advanced material models, including finite-element based as well as continuum micro-mechanics approaches, for the simulation of fiber-reinforced biocomposites. This includes the simulation failure processes (fracture, ductile behavior), transport processes (thermal conductivity, diffusivity, optical transparency), and viscoelasticity.

Knowledge of programming and finite-element methodology in the framework of computational mechanics and nonlinear fracture mechanics beneficial.

Your Profile:

- University Master in the area of civil engineering, mechanical engineering, or similar field
- Excellent study performance and English language skills of at least C1
- Knowledge of scientific work and interest in bio-composite materials and computational mechanics
- Organizational and analytical skills, as well as a structured way of working
- Interest and enjoyment in research and working with students
- Ability to work in a team and problem-solving skills

We offer:

- A fulfilling position with a wide variety and exciting range of tasks in a collegial team
- Hybrid working style with up to 50 % home office option
- A range of attractive social benefits (see Fringe-Benefit Catalogue of TU Wien)
- Wide range of internal and external training opportunities, various career options
- Central location of workplace as well as good accessibility (U1/U4 Karlsplatz)

TU Wien is committed to increasing the proportion of women in particular in leadership positions. Female applicants are explicitly encouraged to apply. Preference will be given to women when equally qualified, unless reasons specific to a male applicant tilt the balance in his favour.

The employment starts as University Assistant with a minimum salary of EUR 3,277.30 gross (14 x per year) according to the collective bargaining agreement for a PhD student.

We look forward to receiving your application until February 12, 2024. Please note that the application shall contain the following application documents:

- Scientific CV (< three pages)
- Motivation Letter (< two page)
- Certificate of diploma degree (copy)
- If available:
 - List of publications (including researchID, google scholar ID and/or Orcid ID)
 - List of teaching activities
 - A list of grades from all exams taken during the course of study

Contact person:

Prof. Josef Füssl

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H <https://www.tuwien.at/en/cee/imws/simulation>

Please mark your application in the email subject field with **[Appl PhD SFB]**